


## Quick Guide to Micropipetting

- **CHOOSE A MICROPIPETTER** whose volume range includes the volume you wish to measure. The pipetter's range is printed either on the plunger knob or on the side of the pipetter.
- **ADJUST THE MICROPIPETTER TO THE DESIRED VOLUME** by turning either its plunger knob or a separate adjustment knob. **Don't force past the pipette's limits, as this breaks the pipette.**
- **OPEN THE TUBES OR BOTTLES** between which you are transferring the intended liquid.
- **PLACE A FRESH PIPET TIP ONTO THE PIPETTER** by placing its barrel straight into a tip in a tip rack and pushing down very gently. Lift straight up to avoid tipping over the tip rack.



Think  
"First Step,  
First Stop"



Think  
"Second Step,  
Second Stop"

### FIRST STEP: MEASURING

- **PUSH THE PLUNGER DOWN TO THE FIRST STOP AND HOLD IT THERE.**
  - **HOLD THE TUBE OR BOTTLE AT EYE LEVEL.**
  - **PLACE THE PIPET TIP INTO THE LIQUID.**
  - **SLOWLY RELEASE THE PLUNGER**, making sure the tip remains in the liquid as the level drops.
  - **REMOVE THE PIPET TIP FROM THE LIQUID.**
  - **CHECK THAT THERE ARE NO AIR BUBBLES IN THE TIP.** If there are bubbles, dispense the liquid back into the tube and try again. Check that your tip is not loose.
- **Do not** adjust a pipet beyond its volume limits.
  - **Do not** let the barrel of the micropipetter touch any liquid.
  - **Do** use a new tip each time you pipet.
  - **Do not** let the pipet tip touch anything other than the liquid you are transferring.
  - **Do** keep your micropipetter held with the tip pointed down. **Do not** lay down a full pipetter.

### SECOND STEP: DISPENSING

- **HOLD THE TUBE OR BOTTLE AT EYE LEVEL.**
- **PLACE THE PIPET TIP AGAINST THE SIDE OF THE TUBE, NEAR THE BOTTOM.**
- **PUSH THE PLUNGER DOWN ALL THE WAY TO THE SECOND STOP AND HOLD IT THERE.**
- **LIFT THE PIPET TIP OUT OF THE TUBE OR BOTTLE** before releasing the plunger.
- **SLOWLY RELEASE THE PLUNGER.**
- **EJECT THE USED TIP INTO A WASTE CUP** by pushing on the ejector button. If the tip is on too tight, remove it with your gloved hand.